



**Re: NW Natural Proposal to Complete Additional Field Visual Surveys at the  
Gasco Sediments Site**

**Sean Sheldrake** to: Kim Slinski

07/31/2012 03:35 PM

"Gladstone, Alan", Ben Hung, Carl Stivers, "John Edwards", "James Peale (jpeale@maulfoster.com)", "Crystal, Mike", "Burr, Myron (Myron.Burr@silttronic.com)", Patty Dost, "Peterson, Lance", Ryan Barth, Bob Wyatt, Alanna Conley, cyril.alex, cora.lori, bayuk.dana, Elizabeth Allen, fuentes.rene, Genevieve.Angle, peterson.jennifer, jeremy\_buck, ANDERSON.Jim, straughan.john, "Peterson, Lance", Cc: mcclincy.matt, POULSEN.Mike, Nancy.Munn, Mark Ader, Chip Humphrey, Kristine Koch, Sean Sheldrake, Richard Muza, reopn, aebbets, audiehuber, Brandy.Humphreys, cunningham, colin, dallen, erin.madden, jdw, Jennifer Peers, jweis, "Michael Karnosh", matt, rose, tomd, rick.j.kepler, Robert.Neely, shephard.burt, ted\_buerger, gainer.tom

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Bob, Ryan, and Kim,

Please see EPA's approval with comments (conditional approval), below.

- 1) The objective for the sheen survey (bullet 1, top of page 2) does not match up with the survey description. The objective should be re-written as follows: Identify areas of the Gasco Sediment Site that exhibit sheen, approximate the sheen size, and map the sheen locations.
- 2) The objective for the ebullition survey (bullet 2, top of page 2) does not match up with the survey description. The objective should be re-written as follows: Identify areas of the Gasco Sediment Site that exhibit ebullition, qualitatively define the frequency and rate of ebullition, map the ebullition locations where possible, and estimate the aerial extent of ebullition. See comment 7 below for a request to add an estimate of the aerial extent of ebullition. Although not indicated in the July 24, 2012 letter, EPA believes observations of "sheen" should be attributed to ebullition for purposes of supporting an active cap design which is protective of potential ebullition-facilitated DNAPL transport.
3. NW Natural should consider conducting the survey using more than a single boat. In addition, given the elevation difference between the riverbank and shoreline having staff stationed at the top of bank with binoculars to visually observe sheen should be considered to supplement the on-river sheen survey.
- 4) The survey area is identified as the Gasco Sediment Site; however the area extends only to the margins of the navigation channel. Although it is unlikely capping will occur beyond the navigation channel, expanding the survey to include the Initial Project Area could provide useful information regarding the extent, occurrence, and sources of sheen/ebullition potentially outside capping areas.
- 5) The area of the survey should also be expanded to include the U.S. Army Corps of Engineers, U.S. Moorings dock area downstream of the Gasco/U.S. Moorings property line where elevated levels of PAHs have been detected in sediment samples.
- 6) NW Natural should provide the criteria for selecting days to conduct the survey (e.g., historic hydrographs). The July 24th letter proposes conducting the survey on the water over a period of three days during August and September. A period of time more representative of low river levels should be selected as sheen and ebullition occurs most frequently during low flow conditions. This may occur in September. EPA notes that mean daily flows are currently in the 8000 - 9000 cfs range. Over a 39 year period from 1972 through 2011, mean daily flows of less than 9000 cfs occur between August 26th and September 1st. Scheduling one of the three survey events within the August 26th to September 1st time period should be considered with care taken to avoid aggravating factors such as sudden rainfall or dam release induced increases in flow to ensure that the low flow condition is monitored.
- 7) In addition to describing the frequency, rate and location of ebullition, the survey should estimate the

aerial extent of ebullition.

8) NW Natural should notify the appropriate governmental agency if sheen that would prompt such notification is observed.

Let me know if you have any questions.

S

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Region 10 Dive Unit: <http://www.epa.gov/region10/dive>

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Visitors: Check-in @ PERC / Service Center on 12th floor:

<http://yosemite.epa.gov/r10/extaff.nsf/Homepage/Visiting+Seattle>

Kim Slinski	Sean/Lance - On behalf of Ryan Barth (he is on...	07/24/2012 12:44:29 PM
From:	Kim Slinski <kslinski@anchorqea.com>	
To:	"Peterson, Lance" <PetersonLE@cdmsmith.com>, Sean Sheldrake/R10/USEPA/US@EPA	
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Date:	07/24/2012 12:44 PM	
Subject:	NW Natural Proposal to Complete Additional Field Visual Surveys at the Gasco Sediments Site	

Sean/Lance -

On behalf of Ryan Barth (b) (6) attached please find a letter describing NW Natural's proposal to conduct additional visual monitoring at the Gasco Sediments Site during three single day events in August/September. This monitoring would be completed in addition to the existing regular visual monitoring that NW Natural is already performing in the vicinity of the pilot cap area. As described in the letter, the objectives of the proposed monitoring would be to identify potential areas of sheen and/or active ebullition. This information will be used to determine the extent of potential sheen generation and/or ebullition occurring at the Site, which may provide useful supporting information during future (post-EE/CA) design-level capping evaluations. August and

September historically have the lowest river elevations and highest water temperatures, which are conditions that typically increase the probability of sheen generation and/or ebullition at DNAPL-contaminated sites. To support the monitoring during these months, NW Natural would appreciate EPA's expedited review, comments, and/or approval of the proposed monitoring. Don't hesitate to call/email me if you have any questions and please confirm when NW Natural is approved to complete this work.

Thanks.

Kim Slinski

**Kimberly Slinski, PE**

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